Peer Navigators and Integrated Care to Address Ethnic Health Disparities of People with Serious Mental Illness

Patrick W. Corrigan,  
Lewis College of Human Sciences, Illinois Institute of Technology, Chicago, Illinois, USA

Susan Pickett,  
Advocates for Human Potential, Chicago, Illinois, USA

Karen Batia, and  
Heartland Health Outreach, Chicago, Illinois, USA

Patrick J. Michaels  
Lewis College of Human Sciences, Illinois Institute of Technology, Chicago, Illinois, USA

Abstract

People of color with serious mental illnesses experience high rates of morbidity and mortality. Patient navigators, developed for cancer care, may help this group benefit from integrated care. This review examined patient navigators’ key ingredients for cancer care for relevance to patients of color for application of peer services to psychiatric goals. Among cancer patients, navigators lead to greater treatment engagement and improved health outcomes for ethnic minority groups. Research also suggests peers can improve integrated care by providing effective psychiatric services to individuals with mental illness. Ongoing research examines peer navigators’ impact on integrated care for patients of color.

Keywords

Patient Navigation; Integrated Care; Primary Health Care Delivery; Treatment Barriers; Racial and Ethnic Groups; Mental Illness

Address correspondence to: Patrick W. Corrigan, Lewis College of Human Sciences, Illinois Institute of Technology, 3424 S. State Street, Chicago, IL 60616, USA. corrigan@iit.edu.
Morbidity and Mortality of People with Serious Mental Illness

People with serious psychiatric disorders have inordinate rates of co-occurring physical illnesses that often worsen disabilities or lead to death (Martens, 2001; WHO, 2005). They show higher incidence and prevalence in cardiovascular and respiratory illness (Badiaga et al., 2009; Diez-Roux, Northridge, Morabia, Bassett, & Shea, 1999), gastro-intestinal disorders (Weinreb, Goldberg, Bassuk, & Perloff, 1998), cancer (Schanzer, Dominguez, Shout, & Caton, 2007), and orthopedic illnesses including those due to accidents (Takano, Nakamura, Takeuchi, & Watanabe, 1999). As a result, people with serious mental illness are hospitalized for physical health problems at much higher rates (Mai, Homan, Sanfilippo, & Emery, 2011) and die, on average 15 to 30 years younger than their cohort (Saha, Chant, & McGrath, 2007).

There has been some attempt to explain high rates of illness and death in terms of the course of psychiatric disorder. Rate of physical morbidity and mortality may parallel severity of psychiatric illness; research has shown, for example, that physical illness seems worse in people with more serious psychiatric disorders such as schizophrenia (Saha et al., 2007) and bipolar disorder (Weiner, Warren, & Fiedorowicz, 2011). Earlier onset seems to be associated with greater morbidity and mortality (Hudson, 2012). What about psychiatric disease leads to greater physical illness? Research implicates some biological pathways. For example, genetically some people with psychiatric conditions are predisposed toward some physical health conditions (e.g., diabetes) (Chacón, Mora, Gervás-Ríos, & Gilaberte, 2011; Fagiolini & Goracci, 2009). Alternatively, long term use of psychotropic medication seems to be associated with cardiovascular illness (Hansen, Maciejewski, Yu-Isenberg, & Farley, 2012) and a metabolic syndrome that heightens risk of heart disease, diabetes, and cerebrovascular accidents (Smith et al., 2008).

More common is research that examines the impact of psychiatric symptoms, disabilities, and associated lifestyle on physical health. Some people with serious mental illnesses make risky life choices related to work, driving, substance use, and interpersonal (including sexual) relations (Lipsky, Caetano, & Roy-Byrne, 2011). People with serious mental illness smoke at much higher rates, as large as 59.1% for people with schizophrenia compared with 18.3% of general population adults (Schroeder & Morris, 2010). Diet (Cerimele & Katon, 2013) and exercise (Wright, Everson-Hock, & Taylor, 2011) are typically worse than the overall American population.

Social Determinants of Illness

In addition to mental-health-related indicators, four social disadvantages contribute to the high rates of illness and death experienced by people with serious mental illness. (1) Poverty and unemployment. People with psychiatric disabilities have prolonged periods of unemployment making workforce re-entry problematic (Nordt, Müller, Rössler, & Lauber,
2007) and are three times more likely to be a member of a family in poverty (Vick, Jones, & Mitra, 2012). (2) Homelessness: Adults with mental illness have greater risk for homelessness which compounds morbidity and mortality (Martens, 2001). (3) Criminal Justice: People with mental illnesses have greater involvement in the criminal justice system which limits health care access (Constantine et al., 2010). They are also at significant risk of crime victimization (Maniglio, 2009). (4) Substance abuse: People with mental illness are at significantly greater risk of substance abuse which is associated with markedly greater physical illness (Carrà & Johnson, 2009).

Ethnic disparities—Impact of these determinants may be even greater among people with mental illness from minority ethnic groups. Compared to Caucasians, twice as many African Americans and Latinos are below the poverty level (U.S. Census Bureau, 2012). African Americans are three times more likely to experience homelessness; Latinos make up 15.7% of people who are homeless (U.S. HUD, 2010). People of color with mental illness are more likely to be involved with the criminal justice system (Warf, Clark, Herz, & Rabinovitz, 2009) and be victims of or generally more exposed to crime (Biafora & Warheit, 2007).

Social factors also lead to barriers in health care for people of color: as limitations in available services or in cultural competence. Both mental and primary care services are less available to patients of color because of poverty (Lanouette, Folsom, Sciolla, & Jeste, 2009). People from ethnic minority groups are less insured than the majority culture (Lee, O’Neill, Park, Scully, & Shenassa, 2012) and services that should be provided by the government safety net are lacking (Darnell, 2011). As a result, clinics are not geographically available (Jerant, Fenton, & Franks, 2012) and access to those that can be found are hindered by inadequate public transportation (Bazzoli, Lee, Hsieh, & Mobley, 2012) or may be located in high crime areas (Hanson & Self-Brown, 2010). Patients of color are less able to establish ongoing relationships with primary care providers necessary to promote engagement between patient, family, and provider team, especially for chronic disorders (Jerant et al., 2012). Integrated behavioral and primary care is notably missing from low income communities (Manderson, Mcmurry, & Piraino, & Stolee, 2012) as are social work or nurse practitioner support teams often responsible for maintaining integrated services (Stange et al., 2010).

Many systems of health care lack cultural competence. Factors leading to alienation from health care clinics and providers in many North American settings include preferences for Western healing beliefs (Padela, Gunter, Killawi, & Heisler, 2012) to the point that alternative, non-Western treatments may be denigrated (Bartels, 2004; Su & Li, 2011), diminished trust (Musa, Schulz, Harris, Silverman, & Thomas, 2009), different reactions to mental illness stigma (Abdullah & Brown, 2011), diverse understandings of mental illness (Martin, 2009), and Western providers missing culturally-specific symptom expression (Tófoli, Andrade, & Fortes, 2011). Exacerbating these differences may be a lack of culturally-matched providers though research on the size of this effect continues to be mixed (Cabral & Smith, 2011). Lack of language proficiency obviously hampers quality care (Kim et al., 2011).
Integrated Care and Patient Navigators

Many barriers prevent people of color with serious mental illness from receiving quality primary and other physical health care. Integrated care is a promising practice for addressing these concerns defined as mental health and general medical care providers working together to address the physical and behavioral health care needs of patients (Butler et al., 2008; Gilbody, Bower, Fletcher, Richards, & Sutton, 2006). Integrated care varies along two axes: decision making (consensual, coordinated, or provider-directed) and location (onsite versus separate mental health/primary care practices). Patient navigation is a strategy that may further enhance the potential of integrated care. Briefly, patient navigators are trained service providers that escort and support patients through multi-levels of care and entitlements, an especially important service for individuals with chronic and serious conditions. Navigators evolved in the cancer clinic to meet the complex needs of its patients; the first navigation program is often attributed to Harold Freeman a New York City oncologist at Harlem Hospital (Freeman, 2006). We briefly review the research literature on cancer navigators and then seek to apply lessons learned for people with mental illness navigating the primary care system.

Research has described its key ingredients and expected effects. Literature reviews (Robinson-White, Conroy, Slavish, & Rosenzweig, 2010; Wells et al., 2008; Pedersen & Hack, 2010), practitioner interviews (Parker et al, 2010), consensus panels of the National Cancer Institute (NCI, 2012), and the Patient Navigator Outreach and Disease Prevention Act of 2005 have yielded two fundamental dimensions of peer navigation (Parker et al., 2010). First are the individual and organizational entities with whom the navigator interacts. Successful navigators essentially serve as interface between patients (and often their family and friends) and a slew of others. These include providers of many kinds: the physician or nurse practitioner leading the treatment team, ancillary diagnosticians and treatment specialists, behavioral health care providers, hospice and palliative care workers, community support services, and faith-based ministry. They include nonclinical staff: receptionists, secretaries, and insurance/entitlement representatives. They include paper or electronic medical record systems, which, in the eye of some navigators, can take on the role of a provider that needs to be regularly consulted and informed to allow care to progress seamlessly. Second is the characterization of tasks performed by navigators. The Patient Navigator Outreach and Disease Prevention Act specified six tasks. (1) Assist in the coordination of health care services. (2) Facilitate the involvement of community organizations to help the patient access care. (3) Notify individuals of clinical trials. (4) Anticipate and help patients overcome barriers. (5) Coordinate with insurers. (6) Conduct ongoing outreach especially to health disparity populations.

Literature reviews have summarized studies done on navigation for cancer care examining both its degree of acceptance and its impact (Robinson-White et al., 2010; Wells et al., 2008) yielding 22 different studies almost entirely as adjunct to cancer care. Results showed patient navigators improved screening rates, diagnostic test participation, or genetic counseling (Dignan et al., 2005; Jandorf, Gutierrez, Lopez, Christie, & Itzkowitz, 2005; Rahm, Sukhanova, Ellis, & Mouchawar, 2007; Tingen et al., 1998; Weinrich et al., 1998). Navigation led to better adherence to ongoing treatment (Battaglia et al., 2007; Ell,
Although one might think patient navigation has been extended to other health care domains, our review of the literature found only one paper each discussing its application to orthopedic (Jester, 2007), renal (Browne, 2009) and asthma care (Black et al., 2010).

Cancer researchers have argued that patient navigators are an excellent tool for addressing ethnic health disparities (Fischer, Sauaia, & Kutner, 2007; Freund, 2011; Jean-Pierre et al., 2011; Natale-Pereira, Enard, Nevarez, & Jones, 2011); in 2002, the NCI Center to Reduce Health Care Disparities established patient navigators as a training and development priority. Navigators help patients from minority ethnic group better access clinics and coordinate services in disadvantaged communities (Ferrante et al., 2008; Natale-Pereira et al., 2011) and better avail insurance and entitlement benefits (Saunders & Alexander, 2009; Schwaderer & Itano, 2007; Wells et al., 2008). Of equal importance, patient navigators seem to enhance cultural competence in cancer treatments. Patients of color report emotional support, “being there”, and feeling heard as essential elements of successful navigators, qualities often perceived as absent in traditional clinics (Carroll et al., 2010; Natale-Pereira et al., 2011). These all translated to perceptions of trust (Han, Lee, Kim, & Kim, 2009; Nguyen, Tran, Kagawa-Singer, & Foo, 2011), perceptions that there were provider “insiders” understanding their perspective and looking out for their concerns (Fischer et al., 2007; Jean-Pierre et al., 2011; Petereit et al., 2008). Navigators also seemed more sensitive to family issues which may be pronounced in some minority cultural groups (Whitt-Glover et al, 2009). Research showed patient navigators to have positive effects on disparity-related concerns; patients from ethnic minority groups had fewer disruptions in care and greater likelihood of completing prolonged treatment regimens as a result of patient navigators (Han et al., 2009). An additional benefit of navigators may be gender competence.

Patient navigators were originally providers specially trained for navigation duties drawn from the ranks of nurse practitioners, social workers, or trained paraprofessionals (Darnell, 2007; Seek & Hogle, 2007). Peers – patients with past experiences with cancer care – soon joined these ranks. In one study, 39 women with a history of breast cancer and treatment (an average of 52 months post diagnosis) were partnered with “sojourners,” patients recently diagnosed with breast cancer (M=2.2 months); contacts occurred about once weekly for up to six months (Giese-Davis et al., 2006). Slope analyses over the six months showed sojourners had significantly improved experiences of diagnosis and treatment, better quality of life, and enhanced personal resources. Results of qualitative interviews with 110 Cambodian, Laotian, and Vietnamese women diagnosed with cancer and having received navigator services believed information and support provided by peers was vital for the course of their care: “in my country, I never know what a Pap smear or mammogram is… however, a navigator helped me understand” (Nguyen et al., 2011). Two studies showed underserved women matched with same group (African Americans, Latinas, and Native Americans) were more likely to pursue regular mammography (Burhansstipanov et al., 1998, 2010). In the one randomized controlled trial, impact of peer navigators on Korean American women with breast cancer was assessed (Maxwell, Jo, Crespi, Sudan, & Bastani, 2010). Among the findings, 97% receiving navigator services completed follow-up treatments compared to 67% in the control arm.
Although careful research of peer navigators in cancer care is limited, clinics are incorporating this strategy into its practices. One review of the literature showed seven out of eleven U.S. demonstration projects on patient navigators used lay or peer navigators (Dohan & Schrag, 2005). Training seemed to be important to anecdotal success and included preservice education to meet certification requirements along with regular inservice training and supervision to maintain standards. Peer navigators are typically supervised by a senior community health worker with broad knowledge of the care system in which navigators work.

**Peer Navigator Services and Integrated Care**

Peer services play an emerging and prominent role in psychiatric interventions in a manner that parallels aspects of cancer navigation. Peer services usually include practical and emotional support for the person traversing various psychiatric rehabilitation programs. Table 1 summarizes eight randomized controlled trials of peer-led services for people with serious mental illness, highlighting the sample’s racial/ethnic characteristics, methodological considerations (i.e., study eligibility criteria, intervention features), and main findings. Review of validity threats would strengthen the review, but this was not included as not all papers clearly reported these limitations.

Four randomized clinical trials (RCT) showed people who received versions of psychiatric case management services from peers demonstrated the same level of functional and symptom stability as those provided by professional or paraprofessional staff. Clarke et al. (2000) randomized people with serious mental illness to one of two conditions, assertive community treatment staffed by consumers or non-consumers of mental health services. Another study by Davidson and colleagues (2004) recruited socially withdrawn people with psychiatric disabilities randomizing participants to either professional or peer-led supported socialization. O’Donnell et al., (1999) enrolled participants with serious mental illness into 12-months of consumer or professional support. A fourth RCT completed by Solomon and colleagues (1995) randomized participants with serious mental illness into 2-years of case management either professional or peer-led. Overall, findings from these four RCTs showed that professional and peer mentor services were not significantly different yet these findings have to be interpreted conservatively because they fundamentally represent support of a null hypothesis (no difference between peer and professional case managers). More recently, Sledge et al. (2011) reported on an intervention that enrolled people with serious mental illness who had two or more psychiatric hospitalizations during the past 18 months. Participants were randomized to weekly support of peer mentors or aftercare as usual. Results showed those receiving peer mentoring had significantly fewer rehospitalizations and inpatient days during the nine months of the study.

Navigation has also appeared as a way to assist the integrated care needs of people with serious mental illness. Assertive community treatment (ACT) teams have been proposed as a strategy for addressing the physical health care needs of people with serious mental illness: a collection of providers including a nurse practitioner intervene in the person’s community to tackle personal health needs over time (Shattell, Donnelly, Scheyett, & Cuddeback, 2011; Weinstein, Henwood, Cody, Jorday, & Lelar, 2011). Despite its promise, researchers have
not yet tested the impact of ACT on integrated care. Two sets of studies, however, have examined the effect of variations of navigator programs on the health care needs of people with mental illness. The first used a paraprofessional case navigator to connect people presenting with psychiatric emergency to primary care who also had not had a primary medical doctor for six or more months (Griswold et al., 2005). Participants were randomized to aftercare as usual or patient navigation that included education about fees and services, facilitation to primary care with shared decision making, index cards for primary care providers with psychiatric information about the patient, and ongoing follow-up including in-home visits and mobile outreach. Three-month results showed 57% of participants receiving patient navigation, compared to 16% in the comparison group, was successfully linked to primary care (Griswold et al., 2005). One-year follow-up showed 62% in the treatment group, compared to 37% in the control were linked to primary care (Griswold, Homish, Pastore, & Leonard, 2010).

Another set of studies used peers to help people with serious mental illness improve medical self-management skills. Investigators adapted the Chronic Disease Self-Management Program (CDSMP: Lorig et al., 1999; Lorig, Hurwicz, Sobel, Hobbs, & Ritter, 2005); a six-session program led by people with chronic, general-medical conditions to teach peers interpretation of symptoms, disease management techniques, regular action planning, and problem solving. Druss and colleagues (2010b) modified CDSMP to address possible gaps in health literacy and cognitive limitations of people with serious mental illness with physical health concerns. The investigators then randomized 80 people with serious psychiatric disorder and one or more chronic medical illness to adapted-CDSMP led by peers with mental illness or usual care. Results showed those receiving peer-led CDSMP had significantly more primary care visits at six month follow-up. The intervention group also had better physical activity, medication adherence, and physical health related quality of life. Another RCT with 63 participants examined an alternative adaptation of CDSMP called Living Well (Goldberg et al., 2013) with a 13-session format. Results showed significant improvements in health attitudes and illness self-management techniques at post-test, with many of these benefits still evident at two-month follow-up.

Implications for Better Integrated Care

These studies show navigators have promise for helping people with serious mental illnesses including patients of color meet their primary care needs. Navigation may help this group better manage primary care providers and clinics so physical health outcomes are enhanced. Peers might play an especially important role in facilitating the navigation process. Given the promise of the limited research reviewed herein, ample work remains. First, what we are calling navigation for integrated care differs from the way it evolved in cancer. The research by Griswold and colleagues (2005, 2010) in the integrated care arena largely limited navigation services to connecting people after psychiatric crisis to primary care; the studies on modified CSDMP (Druss et al., 2010a; Goldberg et al., 2013) was a peer-based attempt at skills training. Key ingredients and goals of navigation for cancer treatment is yet to be developed and tested for integrated care; i.e., using in-the-field navigators to help people with serious mental illness manage physical health concerns by fully engaging in primary care over a longer term. Outcome variables need to expand beyond simply documenting
connection-to-clinics to the nature of engagement. Assessment needs to broaden to include measures of the course of physical illness and related functioning and quality of life measures. Ways in which improved physical health impact mental health also should be assessed; for example, does one’s profile of depression and anxiety progress with better physical health? Research also needs to consider program format and fidelity. What key ingredients identified by cancer researchers also work well for health navigation services for people with serious mental illness? How do these services change when provided by peers?

The question about key ingredients and fidelity suggests examination of program mediators is necessary as research matures. Patient care needs and navigation are likely to be mediated by the nature of the physical illness. Patient navigators are mostly designed and tested for cancer clinics while integrated services begin with the multi-faceted practice of primary care and patients presenting with differing disorders affecting all organic systems. These illnesses vary in levels of impact, pain, distress, and disability. Some physical disorders are treated effectively in the short term, others recur sporadically, while a third requires prolonged tracking and intervention. Some illnesses can be managed well by primary care providers and their teams while others need specialists across multiple clinics and institutions. In each case, the navigation task changes.

Mental illness may further mediate navigation services and integrated care. Druss and colleagues (2010a) adapted CDSMP to be address cognitive limitations of some participants by simplifying the manual’s reading level and adding a user-friendly log to better track self-management tasks. Other symptoms and disabilities of serious mental illness might interact with navigation services. Some people with psychiatric disorders are challenged by anxiety and depression which interfere with health care plans. Others have interpersonal dysfunctions which hinder engagement. Many of these wax and wane with the course of the disorder, dynamic variables that need to be included in models of navigation services.

People with serious mental illness often abuse alcohol and other drugs, factors that might also mediate patient navigation. The stigma of mental illness interferes with psychiatric services and so might interfere with patient navigation. Alternatively, research must consider how cognitive, emotional and interpersonal challenges of peers with mental illness impact their navigation skills. Research does not seem to suggest these kinds of problems hamper peer duties (Davidson et al., 2006) but specific effects on navigation of the primary care system will need to be examined.

The third important mediator of concern in this paper is ethnic group and other social determinants of illness. Although innovators from the cancer field believe patient navigators are a valuable tool for engaging patients of color (Natale-Pereira et al., 2011), careful research on cancer clinic navigation and ethnic status is still thin. Research has largely not examined the impact of navigation services of any kind (for integrated care or as case management for psychiatric disabilities) as they interact with ethnic factors. This work needs to not only examine cultural and language factors, but also the social disadvantages that are experienced by people of color that often drive health and health disparities. Research needs to not only examine potential benefits across all ethnic groups, but how the unique character of specific cultures impact patient navigators.
Adapting patient navigation for integrated care is the challenge. Community based participatory research (CBPR) is one solution (Minkler & Wallerstein, 2008). CBPR is a philosophy and approach to science that believes research on any group can only be done validly when professional researchers partner with that group: i.e., people of color with serious mental illness. As partners, co-investigators with lived experience have shared leadership roles in all elements of research design and implementation: defining research questions and subsequent hypotheses, developing interventions meant to reflect hypotheses, describing measures and design that will test interventions, conducting statistical analyses to make sense of data collected per design, and interpreting findings leading to recommendations with public health significance.

CBPR among people of color with serious mental illness offers intriguing methodological questions. First, the kind of social disadvantage that describes this disenfranchised group, at its most extreme leading to homelessness, seems to challenge notions of community in CBPR. By virtue of their alienation, people who are homeless do not seem to constitute an organization or discrete community like, for example, Native American Tribes or ethnic community organizations that are partners in other program development efforts. Existing research, however, contradicts this concern showing that homeless people comprise unique and diverse communities that have worked collaboratively with researchers seeking to improve their capacities and resources (Ravenell, Whitaker, & Johnson, 2008; Washington, Moxley, Garriott, & Crystal, 2009). Second, might the deficits of serious mental illness undermine a CBPR process like they alter patient navigation? For example, do the cognitive dysfunctions or interpersonal difficulties experienced by some people with serious mental illnesses undermine participation in the partnership process? This is an important empirical question that needs to be examined alongside other moderators of navigator programs. A recent review suggests, however, that people with serious mental illnesses are able to fully participate in and add to the CBPR process especially when provided reasonable accommodations (Corrigan & Shapiro, 2010).

CBPR poses a third, ironic question; does adapting an intervention based on minority group feedback distort its real world manifestation compared to evidence-based standards and fidelity assessments? For example, CBPR with African Americans with serious mental illness could lead to peer navigators that are different from the cancer care model. Research has shown, for example, that people with mental illness from cultural minority groups experience peer support differently than the white majority; people of color often report feeling not “belonging” to traditional care while Whites were more likely to prefer professional rather than peer services (Jonikas et al., 2010). This is the kind of question embodied in comparative effectiveness research: what aspects of evidence based practices work best for different groups of people?

References


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### Table 1
Summary of randomized controlled trials of peer-based support services for people with serious mental illness.

<table>
<thead>
<tr>
<th>1st Author Year</th>
<th>N</th>
<th>Race/Ethnic Characteristics</th>
<th>Study Eligibility Criteria</th>
<th>Intervention Features</th>
<th>Main Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarke 2000</td>
<td>114</td>
<td>82% Caucasian, 8% African American, 10% Other/multiple</td>
<td>SMI</td>
<td>Assertive Community Treatment staffed by consumer or non-consumer</td>
<td>No difference between peer and professional case managers</td>
</tr>
<tr>
<td>Davidson 2004</td>
<td>260</td>
<td>82% Caucasian, 11% African American, 2% Latino 1% Asian/PI</td>
<td>Psychiatric disability; social withdrawal</td>
<td>Supported socialization</td>
<td>No differences between peer and professional case managers</td>
</tr>
<tr>
<td>Druss 2010</td>
<td>80</td>
<td>73% African American 25% Caucasian</td>
<td>SMI and chronic illness</td>
<td>6 session illness self-management</td>
<td>Peer-led services more primary care visits at follow-up</td>
</tr>
<tr>
<td>Goldberg 2013</td>
<td>63</td>
<td>67% African American, 29% Caucasian, 3% Multiple, 2% Latino</td>
<td>SMI and chronic illness</td>
<td>13 session illness self-management</td>
<td>Improvement in health attitudes and self-management</td>
</tr>
<tr>
<td>Griswold 2005, 2010</td>
<td>101</td>
<td>37% African American, 9% Latino</td>
<td>primary care psychiatric Emergency; no PMD visit last 6 months</td>
<td>Ongoing Peer-based health care support by phone and home visit</td>
<td>Receipt of peer navigation led to more primary care linkage</td>
</tr>
<tr>
<td>O’Donnell 1999</td>
<td>119</td>
<td>None reported</td>
<td>SMI</td>
<td>12 months of consumer advocate support</td>
<td>No differences between peer and professional case managers</td>
</tr>
<tr>
<td>Sledge 2011</td>
<td>74</td>
<td>None reported</td>
<td>SMI &amp; 2+ psychiatric hospitalizations in past 18 months</td>
<td>Weekly peer support</td>
<td>Peer services related to fewer hospitalizations and inpatient days</td>
</tr>
<tr>
<td>Solomon 1995</td>
<td>90</td>
<td>79% African American 19% Caucasian 2% Latino</td>
<td>SMI</td>
<td>Two years of service consumer case management</td>
<td>No differences between peer and professional case managers</td>
</tr>
</tbody>
</table>